

# Setting Up a Powerful and Functional Oracle Development Desktop

Presented by

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# Requirements

- Self-contained, single physical machine
- Capable of setting up a variety of different configurations (multiple operating systems, different Oracle versions, advanced configurations like RAC)
- Connectivity to multiple networks simultaneously (via different VPN's)
- Ability to work with slow network connections or disconnected if necessary



# Host Configuration

Any modern flavor of Windows or Linux (or Mac?)

- Host OS choice dependent on corporate support, productivity app compatibility, personal preference
- 64-bit to support maximum memory
- Keep host “light” if planning to run multiple VM's

# Host Configuration

## Bare metal desktop hypervisor

- Think VMware vSphere (ESXi) or Oracle VM for the desktop
- Products from Citrix (XenClient) and Virtual Computer (NxTop)
- Benefits:
  - Designed specifically for virtualization
  - Lighter weight than traditional desktop OS
  - Can be managed (backups, updates) over the network
- Negatives:
  - New technology that is hard to get right
  - Limited hardware compatibility (XenClient)

# Storage

## Localized storage

- The host and each VM have their own local storage
- Easy to understand and setup

## Shared storage

- Virtual NAS giving VM's access to network storage (Openfiler and FreeNAS)
- Facilitates more complex Oracle configurations (e.g. RAC)
- Adds complexity and requires additional lightweight VM to act as storage server

# Virtual Machines

- Several choices for Desktop virtualization products
  - VMware (Workstation, Server, Player)
  - VirtualBox
  - Parallels Desktop
- Key features from an Oracle developer perspective
  - ✓ 32 and 64-bit support for both hosts and guests
  - ✓ Various networking topographies (e.g. internal networking and paravirtualized network adapters)
  - ✓ Snapshots, allowing you to revert back to a previous point in time
  - ✓ Flexibility in resource allocation (i.e. virtual CPUs for guests to take advantage of modern multi-core platforms)

# Backups

- Multiple levels of backups, particularly if using traditional VM and network storage
- Regular full image backup of whole machine
- Separate backups of each VM, shared storage, and other critical files (e.g. client work)

# Pulling It Together

DEMO



# Links

- [virtualbox.org](http://virtualbox.org) - Oracle's desktop virtualization do
- [citrix.com/xenclient](http://citrix.com/xenclient) - Citrix's bare-metal client hypervisor
- [virtualcomputer.com](http://virtualcomputer.com) - Bare-metal client hypervisor solution
- [openfiler.com](http://openfiler.com) - Open source network storage software
- [freenas.org](http://freenas.org) - Another open source network storage solution
- [www.idevelopment.info/data/Oracle/DBA\\_tips/Oracle10gRAC/CLUSTER\\_12.shtml](http://www.idevelopment.info/data/Oracle/DBA_tips/Oracle10gRAC/CLUSTER_12.shtml) – Comprehensive article on building and inexpensive Oracle RAC on Linux